



National Center for Science and  
Engineering Statistics

# Nonprofit Research Activities: FY 2021

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## General Notes

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The Nonprofit Research Activities (NPRA) FY 2021 module of the 2022 Annual Business Survey (ABS) is conducted by the Census Bureau in partnership with the National Center for Science and Engineering Statistics (NCSES) within the National Science Foundation. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data (Project No. P-7504866, Disclosure Review Board [DRB] approval number: CBDRB-FY23-0334).

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TABLE 1

**Nonprofit organizations, by type of nonprofit organization and R&D activity: FY 2021**

(Number)

Type of nonprofit organization <sup>a</sup>	All organizations	Organizations with R&D activity	Organizations without R&D activity
All organizations	40,703	2,835	37,869
Healthcare	22,568	658	21,908
Science and technology	650	514	136
Other nonprofit organizations	17,487	1,660	15,826

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 2

**Total expenses of nonprofit organizations, by type of nonprofit organization and R&D activity: FY 2021**

(Dollars in thousands)

Type of nonprofit organization <sup>a</sup>	All organizations	Organizations with R&D activity	Organizations without R&D activity
All organizations	1,609,295,484	885,830,860	723,464,624
Healthcare	1,368,594,500	813,783,721	554,810,779
Science and technology	23,271,350	21,265,432	2,005,919
Other nonprofit organizations	217,429,633	50,781,707	166,647,926

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 3

**Total expenditures for R&D performed by nonprofit organizations, by type of nonprofit organization and type of cost: FY 2021**

(Dollars in thousands)

Type of nonprofit organization <sup>a</sup>	All R&D expenditures	Type of cost		
		Salaries, wages, and fringe benefits	Depreciation	All other costs
All organizations	27,190,025	14,437,833	794,148	11,958,044
Healthcare	13,549,636	7,539,728	351,346	5,658,562
Science and technology	11,217,704	5,637,019	364,454	5,216,231
Other nonprofit organizations	2,422,685	1,261,086	78,348	1,083,252

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 4

**Total expenditures for R&D performed by nonprofit organizations, by source of funds and type of nonprofit organization: FYs 2020–21**

(Dollars in thousands)

Source of funds	Type of nonprofit organization <sup>a</sup>							
	FY 2020				FY 2021			
	All organizations	Healthcare	Science and technology	Other nonprofit organizations	All organizations	Healthcare	Science and technology	Other nonprofit organizations
All R&D expenditures	27,052,537	14,276,583	10,400,065	2,375,889	27,190,025	13,549,636	11,217,704	2,422,685
Internal funds	6,056,780	4,068,940	1,433,877	553,963	7,538,477	4,683,093	1,882,976	972,408
Federal government	11,958,721	5,354,330	6,142,966	461,425	11,619,826	4,673,876	6,512,232	433,718
State and local government	572,120	192,988	275,608	103,524	327,686	103,791	205,441	18,453
Businesses	3,102,869	1,675,774	863,416	563,679	3,010,298	1,543,437	1,088,336	378,526
Universities	307,158	180,059	118,300	8,799	274,268	183,360	84,760	6,147
Foundations	2,313,837	970,308	856,559	486,970	1,727,747	751,126	748,921	227,700
All other nonprofits	772,880	419,780	320,449	32,651	671,772	347,439	197,267	127,066
Individual donors	1,390,846	1,000,669	246,809	143,369	1,379,891	955,638	291,407	132,845
Other	577,325	413,736	142,081	21,509	640,062	307,876	206,364	125,822

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 5

**Total expenditures for R&D performed by nonprofit organizations, by field and type of nonprofit organization: FYs 2020—21**

(Dollars in thousands)

Field	Type of nonprofit organization <sup>a</sup>							
	FY 2020				FY 2021			
	All organizations	Healthcare	Science and technology	Other nonprofit organizations	All organizations	Healthcare	Science and technology	Other nonprofit organizations
All R&D expenditures	27,052,537	14,276,583	10,400,065	2,375,889	27,190,025	13,549,636	11,217,704	2,422,685
Sciences	24,623,494	14,250,633	8,586,281	1,786,580	24,140,090	13,451,139	8,756,764	1,932,188
Agricultural sciences and natural resources and conservation	672,759	0	336,850	335,909	650,232	0	413,905	236,326
Biological, biomedical, and health sciences	20,070,464	14,114,733	5,457,060	498,672	20,108,739	13,349,195	5,826,208	933,337
Geosciences, atmospheric sciences, and ocean sciences	989,623	123	813,064	176,436	400,785	0	365,549	35,236
Mathematics, statistics, and computer and information sciences	516,304	40,427	399,216	76,661	767,464	1,231	565,609	200,624
Physical sciences	505,582	0	447,760	57,822	714,013	0	570,527	143,487
Psychology and social sciences	1,868,762	95,350	1,132,331	641,080	1,498,857	100,713 i	1,014,966	383,178
Engineering	1,563,671	20,297	1,450,716	92,658	2,027,249	20,218	1,968,828	38,203
Humanities	145,296	0	10,142	135,153	56,256	557	36,476	19,223
Other fields	720,077	5,654	352,925	361,498	966,430	77,723 r	455,635	433,072

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse; r = relative standard error &gt; 50%.

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 6

**Total expenditures for R&D performed by nonprofit organizations, by source of funds, type of R&D, and type of nonprofit organization: FYs 2020—21**

(Dollars in thousands)

Source of funds and type of R&D	Type of nonprofit organization <sup>a</sup>							
	FY 2020				FY 2021			
	All organizations	Healthcare	Science and technology	Other nonprofit organizations	All organizations	Healthcare	Science and technology	Other nonprofit organizations
Total R&D expenditures	27,052,537	14,276,583	10,400,065	2,375,889	27,190,025	13,549,636	11,217,704	2,422,685
Basic research	12,364,015	7,303,585	4,489,489	570,941	11,926,470	6,356,622	4,791,591	778,257
Applied research	10,225,512	4,431,883	4,482,766	1,310,863	9,975,825	4,183,231	4,794,328	998,266
Experimental development	4,463,010	2,541,115	1,427,810	494,084	5,286,628	3,009,782	1,630,683	646,163
Federally funded R&D expenditures	11,958,721	5,354,330	6,142,966	461,425	11,619,826	4,673,876	6,512,232	433,718
Basic research	5,216,843	2,751,672	2,379,151	86,021	4,841,475	2,209,914	2,538,136	93,425
Applied research	4,901,954	1,840,947	2,771,211	289,796	5,100,233	1,751,043	3,067,423	281,767
Experimental development	1,839,924	761,712	992,604	85,609	1,894,635	723,556	1,096,754	74,325
Nonfederally funded R&D expenditures	15,093,816	8,922,253	4,257,099	1,914,464	15,313,490	8,824,930	4,515,392	1,973,168
Basic research	7,147,172	4,551,913	2,110,338	484,921	7,079,301	4,141,013	2,253,455	684,832
Applied research	5,323,558	2,590,936	1,711,555	1,021,067	4,866,416	2,421,911	1,728,007	716,498
Experimental development	2,623,086	1,779,404	435,206	408,476	3,367,774	2,262,006	533,930	571,838

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 7

**Funds provided by nonprofit organizations to others for R&D, by type of agreement and type of nonprofit organization: FYs 2020—21**

(Dollars in thousands)

Type of agreement	Type of nonprofit organization <sup>a</sup>							
	FY 2020				FY 2021			
	All organizations	Healthcare	Science and technology	Other nonprofit organizations	All organizations	Healthcare	Science and technology	Other nonprofit organizations
All funds for R&D	8,225,479	908,100	1,606,213	5,711,166	8,733,945	1,310,660	1,893,456	5,529,828
R&D grants or contracts	5,878,959	203,850	586,426	5,088,683	6,200,181	432,544	676,031	5,091,606
Subcontracts and subawards	2,346,519	704,250	1,019,787	622,482	2,533,755	878,117	1,217,425	438,213

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**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 8

**Employees of nonprofit organizations, by R&D activity and type of nonprofit organization: FYs 2020—21**

(Number)

R&D activity	Type of nonprofit organization <sup>a</sup>							
	FY 2020				FY 2021			
	All organizations	Healthcare	Science and technology	Other nonprofit organizations	All organizations	Healthcare	Science and technology	Other nonprofit organizations
All organizations	9,076,938	7,305,438	86,164	1,685,336	8,684,811	7,534,791	87,395	1,062,625
Organizations with R&D activity	3,172,380	2,943,557	81,142	147,681	3,811,583	3,586,431	81,241	143,910
Organizations without R&D activity	5,904,559	4,361,881	5,022	1,537,656	4,873,228	3,948,359	6,154	918,715

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development center administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 9

**Persons working on R&D at nonprofit organizations, by employment status and type of nonprofit organization: FYs 2020—21**

(Number)

Employment status	Type of nonprofit organization <sup>a</sup>									
	FY 2020					FY 2021				
	All organizations	Healthcare	Science and technology	Other nonprofit organizations		All organizations	Healthcare	Science and technology	Other nonprofit organizations	
Organization employees working on R&D	212,995	126,859	66,559	19,577		196,418	114,871	64,075	17,473	
Contract employees working on R&D	12,497	3,543	3,956	4,998	r	12,550	3,096	5,664	3,791	
Volunteers working on R&D	16,158	1,511	10,836	3,811		20,804	1,457	10,005	9,341	

r = relative standard error &gt; 50%.

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 10

**R&D employees of nonprofit organizations, by occupation category and type of nonprofit organization: FYs 2020—21**

(Number)

Occupation category	Type of nonprofit organization <sup>a</sup>							
	FY 2020				FY 2021			
	All organizations	Healthcare	Science and technology	Other nonprofit organizations	All organizations	Healthcare	Science and technology	Other nonprofit organizations
All R&D employees	212,995	126,859	66,559	19,577	196,418	114,871	64,075	17,473
Researchers	79,353	46,160 i	24,596	8,598	77,265	44,216	25,583	7,466
Technicians	76,436	42,701	28,915	4,819	72,145	42,276 i	25,953	3,916
Other support personnel	57,206	37,998	13,048	6,160	47,008	28,379	12,539	6,090

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

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**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 11

**Full-time equivalent R&D employees of nonprofit organizations, by occupation category and type of nonprofit organization: FYs 2020—21**

(Number)

Occupation category	Type of nonprofit organization <sup>a</sup>									
	FY 2020					FY 2021				
	All organizations	Healthcare	Science and technology	Other nonprofit organizations		All organizations	Healthcare	Science and technology	Other nonprofit organizations	
All full-time equivalent R&D employees	151,701	81,993	57,800	11,907		147,578	80,211	55,527	11,839	
Researchers	57,594	29,753	21,427	6,414		57,434	28,946	22,364	6,124	
Technicians	57,613	28,857	25,705	3,052		57,427	31,552	23,136	2,739	
Other support personnel	36,494	23,383	10,669	2,441		32,716	19,713	10,027	2,977	

<sup>a</sup> Nonprofit organizations are classified using the 2017 North American Industry Classification System code that accounts for the majority of their payroll. This classification may differ from the National Taxonomy of Exempt Entities Core Codes system used by the Internal Revenue Service and National Center for Charitable Statistics.

**Note(s):**

These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 12

**Nonprofit organizations with R&D activity, by state: FY 2021**

(Number)

State	Total
All states	2,835
Alabama	24
Alaska	18
Arizona	28
Arkansas	8
California	391
Colorado	60
Connecticut	51
Delaware	S
District of Columbia	252
Florida	101
Georgia	27
Hawaii	13
Idaho	11
Illinois	145
Indiana	32
Iowa	7
Kansas	13
Kentucky	20
Louisiana	18
Maine	25
Maryland	91
Massachusetts	169
Michigan	73
Minnesota	41
Mississippi	9
Missouri	29
Montana	9
Nebraska	16
Nevada	13
New Hampshire	S
New Jersey	108
New Mexico	21
New York	298
North Carolina	43
North Dakota	S
Ohio	46
Oklahoma	18
Oregon	55
Pennsylvania	100
Rhode Island	13
South Carolina	13
South Dakota	8
Tennessee	24
Texas	122
Utah	4
Vermont	16
Virginia	111
Washington	81
West Virginia	6
Wisconsin	49

TABLE 12  
Nonprofit organizations with R&D activity, by state: FY 2021

(Number)

State	Total
Wyoming	4

S = suppressed for reliability; estimate does not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality.

**Note(s):**  
These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**  
National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 13

**Total expenses of nonprofit organizations with R&D activity, by state: FY 2021**

(Dollars in thousands)

State	Total	
All states	885,830,860	
Alabama	1,296,873	
Alaska	1,417,381	
Arizona	22,406,332	
Arkansas	1,483,162	i
California	159,059,670	
Colorado	25,586,656	
Connecticut	4,645,251	
Delaware	S	
District of Columbia	6,974,472	
Florida	32,600,107	
Georgia	12,393,273	
Hawaii	2,816,248	
Idaho	4,665,921	
Illinois	30,612,416	
Indiana	7,699,728	
Iowa	765,587	
Kansas	509,109	
Kentucky	2,444,136	
Louisiana	2,213,572	
Maine	4,940,974	
Maryland	7,041,992	
Massachusetts	62,709,773	
Michigan	37,348,598	
Minnesota	36,214,865	
Mississippi	49,560	
Missouri	4,787,144	
Montana	749,766	
Nebraska	1,251,023	
Nevada	1,866,690	
New Hampshire	S	
New Jersey	21,553,621	
New Mexico	88,398	
New York	56,300,245	
North Carolina	5,555,302	
North Dakota	S	
Ohio	36,281,705	
Oklahoma	3,280,096	
Oregon	3,301,428	
Pennsylvania	14,604,055	
Rhode Island	797,769	
South Carolina	7,522,723	
South Dakota	32,377	
Tennessee	16,535,234	
Texas	30,445,180	
Utah	8,771,657	
Vermont	281,106	
Virginia	23,175,381	
Washington	50,026,534	
West Virginia	27,343	
Wisconsin	128,148,456	

TABLE 13  
Total expenses of nonprofit organizations with R&D activity, by state: FY 2021

(Dollars in thousands)

State	Total
Wyoming	15,070

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse. S = suppressed for reliability; estimate does not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality.

**Note(s):**  
These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**  
National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 14

**Employees of nonprofit organizations with R&D activity, by state: FY 2021**

(Number)

State	Total
All states	3,811,583
Alabama	6,891
Alaska	7,207
Arizona	103,341
Arkansas	9,325
California	348,494
Colorado	103,070
Connecticut	21,228
Delaware	S
District of Columbia	18,240
Florida	162,607
Georgia	65,031
Hawaii	11,828
Idaho	19,065
Illinois	121,772
Indiana	50,287
Iowa	6,237
Kansas	8,883
Kentucky	12,709
Louisiana	12,315
Maine	31,084
Maryland	44,732
Massachusetts	177,778
Michigan	224,385
Minnesota	171,559
Mississippi	479
Missouri	26,622
Montana	3,266
Nebraska	3,552
Nevada	9,172
New Hampshire	S
New Jersey	116,344
New Mexico	429
New York	235,999
North Carolina	25,430
North Dakota	S
Ohio	216,019
Oklahoma	14,540
Oregon	17,982
Pennsylvania	97,332
Rhode Island	16,810
South Carolina	36,232
South Dakota	390
Tennessee	86,906
Texas	156,715
Utah	48,538
Vermont	2,393
Virginia	81,631
Washington	187,435
West Virginia	115
Wisconsin	677,054

TABLE 14  
Employees of nonprofit organizations with R&D activity, by state: FY 2021

(Number)

State	Total	
Wyoming	152	

S = suppressed for reliability; estimate does not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality.

**Note(s):**  
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**Source(s):**  
National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 15

**Total expenditures for R&D performed by nonprofit organizations, by state and source of funds: FY 2021**

(Dollars in thousands)

State	All R&D expenditures	Internal funds	Federal government	All other sources of funds
All states	27,190,025	7,538,477	11,619,826	8,031,722
Alabama	119,648	13,491	54,932	51,225
Alaska	17,348	102	15,422	1,823
Arizona	167,675	57,115	86,227	24,333
Arkansas	74,352	i 26,182	i 25,982	22,189
California	3,534,937	840,275	1,570,592	1,124,069
Colorado	348,167	27,098	93,339	227,729
Connecticut	102,602	64,657	18,088	19,857
Delaware	S	S	S	S
District of Columbia	1,032,981	259,133	239,050	534,798
Florida	459,861	100,250	188,516	171,096
Georgia	91,245	24,544	17,004	49,697
Hawaii	39,332	17,901	9,032	12,398
Idaho	63,591	31,598	10,528	21,465
Illinois	746,646	364,473	210,908	171,265
Indiana	27,891	13,029	554	14,309
Iowa	6,061	4,671	956	435
Kansas	13,830	3,190	613	10,028
Kentucky	9,679	3,626	2,714	3,338
Louisiana	39,296	7,184	22,043	10,069
Maine	178,509	2,951	134,499	41,060
Maryland	1,731,158	857,951	811,349	61,858
Massachusetts	5,348,688	1,154,418	2,502,291	1,691,979
Michigan	247,090	96,868	70,624	79,597
Minnesota	1,349,831	732,551	i 186,410	i 430,871
Mississippi	993	0	993	0
Missouri	107,125	44,202	29,374	33,550
Montana	7,186	531	1,292	5,363
Nebraska	10,720	926	8,871	923
Nevada	14,933	4,186	3,656	7,091
New Hampshire	S	S	S	S
New Jersey	171,439	33,429	36,341	101,670
New Mexico	21,392	5,047	8,707	7,638
New York	3,207,374	1,070,278	1,078,322	1,058,774
North Carolina	886,441	15,259	750,065	121,117
North Dakota	S	S	S	S
Ohio	1,291,738	435,505	547,830	308,403
Oklahoma	86,741	589	40,933	45,219
Oregon	45,490	14,026	15,295	16,169
Pennsylvania	758,073	172,700	366,028	219,344
Rhode Island	170,772	10,994	71,747	88,031
South Carolina	6,567	342	3,846	2,379
South Dakota	0	0	0	0
Tennessee	630,502	381,165	228,438	20,900
Texas	1,233,893	208,460	575,078	450,355
Utah	25,941	1,728	12,425	11,788
Vermont	9,821	681	4,542	4,598
Virginia	857,507	81,589	649,502	126,416
Washington	1,450,605	164,635	833,697	452,273
West Virginia	21,883	0	8,688	13,196
Wisconsin	390,083	188,636	52,217	149,231

TABLE 15  
Total expenditures for R&D performed by nonprofit organizations, by state and source of funds: FY 2021

(Dollars in thousands)

State	All R&D expenditures	Internal funds	Federal government	All other sources of funds
Wyoming	113	0	113	0

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse. S = suppressed for reliability; estimate does not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality.

**Note(s):**  
These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**  
National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 16

**Funds provided by nonprofit organizations to others for R&D, by state: FY 2021**

(Dollars in thousands)

State	Total
All states	8,733,945
Alabama	21,119
Alaska	8,128
Arizona	14,214
Arkansas	0
California	799,355
Colorado	107,064
Connecticut	65,101
Delaware	S
District of Columbia	336,003
Florida	59,661
Georgia	169,995
Hawaii	7,773
Idaho	3,773
Illinois	304,328
Indiana	7,956
Iowa	2,275
Kansas	589
Kentucky	12,420
Louisiana	10,294
Maine	16,603
Maryland	465,979
Massachusetts	537,889
Michigan	69,744
Minnesota	33,168
Mississippi	425
Missouri	189,366
Montana	1,408
Nebraska	18,917
Nevada	5,547
New Hampshire	S
New Jersey	142,631
New Mexico	4,311
New York	1,615,896
North Carolina	225,524
North Dakota	S
Ohio	81,884
Oklahoma	71,121
Oregon	40,121
Pennsylvania	249,592
Rhode Island	30,380
South Carolina	10,502
South Dakota	1,749
Tennessee	49,616
Texas	335,854
Utah	1,919
Vermont	213
Virginia	269,528
Washington	2,270,338
West Virginia	1,315
Wisconsin	61,690

**TABLE 16**  
**Funds provided by nonprofit organizations to others for R&D, by state: FY 2021**

(Dollars in thousands)

State	Total
Wyoming	618

S = suppressed for reliability; estimate does not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality.

**Note(s):**  
These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**  
National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 17

**Persons working on R&D at nonprofit organizations, by state: FY 2021**

(Number)

State	Total	
All states	196,418	
Alabama	798	
Alaska	197	
Arizona	955	
Arkansas	784	i
California	19,984	
Colorado	1,597	
Connecticut	529	
Delaware	S	
District of Columbia	5,527	
Florida	6,496	i
Georgia	686	
Hawaii	352	
Idaho	683	
Illinois	7,185	i
Indiana	1,016	
Iowa	53	
Kansas	120	
Kentucky	166	
Louisiana	228	
Maine	1,392	
Maryland	6,541	
Massachusetts	33,838	
Michigan	1,781	
Minnesota	20,178	i
Mississippi	13	
Missouri	504	
Montana	43	
Nebraska	38	
Nevada	159	
New Hampshire	S	
New Jersey	1,403	
New Mexico	185	
New York	18,538	
North Carolina	4,237	
North Dakota	S	
Ohio	10,025	
Oklahoma	657	
Oregon	520	
Pennsylvania	4,108	
Rhode Island	2,355	
South Carolina	113	
South Dakota	0	
Tennessee	4,460	
Texas	8,232	
Utah	702	
Vermont	133	
Virginia	14,892	
Washington	8,710	
West Virginia	81	
Wisconsin	4,846	

TABLE 17  
Persons working on R&D at nonprofit organizations, by state: FY 2021

(Number)

State	Total
Wyoming	3

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse. S = suppressed for reliability; estimate does not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality.

**Note(s):**  
These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**  
National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE 18

**Full-time equivalent R&D employees of nonprofit organizations, by state: FY 2021**

(Number)

State	Total	
All states	147,578	
Alabama	771	
Alaska	175	
Arizona	856	
Arkansas	538	i
California	12,846	
Colorado	1,494	
Connecticut	324	
Delaware	S	
District of Columbia	4,638	
Florida	4,477	i
Georgia	617	
Hawaii	226	
Idaho	592	
Illinois	3,219	
Indiana	280	
Iowa	43	
Kansas	108	
Kentucky	79	
Louisiana	190	
Maine	1,354	
Maryland	6,337	
Massachusetts	23,261	
Michigan	1,234	
Minnesota	14,544	i
Mississippi	10	
Missouri	427	
Montana	37	
Nebraska	38	
Nevada	140	
New Hampshire	S	
New Jersey	1,229	
New Mexico	142	
New York	14,255	
North Carolina	2,658	
North Dakota	S	
Ohio	8,603	
Oklahoma	647	
Oregon	273	
Pennsylvania	3,286	
Rhode Island	1,784	
South Carolina	88	
South Dakota	0	
Tennessee	4,314	
Texas	7,339	
Utah	701	
Vermont	120	
Virginia	13,690	
Washington	7,108	
West Virginia	72	
Wisconsin	2,309	

TABLE 18  
Full-time equivalent R&D employees of nonprofit organizations, by state: FY 2021

(Number)

State	Total	
Wyoming	3	

i = more than 50% of the estimate is a combination of imputation and reweighting to account for nonresponse. S = suppressed for reliability; estimate does not meet publication standards because of high sampling variability, poor response quality, or other concerns about the estimate quality.

**Note(s):**  
These data exclude nonprofit universities and colleges and federally funded research and development centers administered by nonprofit organizations. Detail may not add to total because of rounding.

**Source(s):**  
National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

## Technical Notes

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### Survey Overview (FY 2021 Survey Cycle)

*Purpose.* The NPRA module of the ABS collects information on R&D performed or funded by tax-exempt nonprofit organizations in the United States. The nonprofit sector is one of four sectors (business, government, higher education, and other private nonprofit) that fund or perform R&D.

NCSES combines nonprofit sector data with data from the other sectors to estimate total national R&D expenditures. Results of the research activities data collected from nonprofit organizations will be used to report updated, valid, and reliable estimates of U.S. nonprofit R&D in [National Patterns of R&D Resources](#) and the Bureau of Economic Analysis system of national accounts.

The data collected will also be incorporated into the National Science Board's biennial report, [Science and Engineering Indicators](#). The R&D data from the nonprofit module will be reported in the Organization for Economic Cooperation and Development (OECD) periodic publications and used for international comparisons of R&D efforts. NCSES also anticipates professional associations will use data from the nonprofit R&D module. Likely users in this category include, but are not limited to, the Science Philanthropy Alliance, the Association of Independent Research Institutes, and the Health Research Alliance.

*Data collection authority.* Title 13, United States Code, Sections 8(b), 131, and 182; Title 42, United States Code, Section 1861-76 (NSF Act of 1950, as amended); and Section 505 within the America COMPETES Reauthorization Act of 2010, authorize this collection. Sections 224 and 225 of Title 13 require mandatory response. Office of Management and Budget No. 0607-1004.

*Survey sponsor.* NCSES within NSF.

*Survey collection and tabulation agent.* The survey is conducted annually by the Census Bureau in accordance with an interagency agreement with NCSES.

### Key Survey Information

*Frequency.* Annual.

*Initial survey year.* FY 2020. (The questions in the FY 2020 module were first developed and used on the FY 2016 Nonprofit Research Activities Survey, which was the first national survey of R&D activities in the U.S. nonprofit population since 1997. Due to the differences between the previous surveys and the current module, FY 2020 is considered the initial survey year for the annual series.)

*Reference period.* FY 2021. The fiscal year referred to throughout this report was the nonprofit organization's fiscal year, which varied across the nonprofit population; for the majority of organizations reporting R&D performance, this fiscal year ended in either September or December 2021.

*Response unit.* Organizations.

*Sample or census.* Sample.

*Population size.* 40,650 organizations.

*Sample size.* 8,050 organizations.

## Survey Design

*Target population.* Included are all nonfarm businesses with at least one in-scope location filing Internal Revenue Service (IRS) Form 990 as a tax-exempt organization and with annual payroll of \$500,000 or more.

*Sampling frame.* The sampling frame was constructed from the final 2020 Business Register and the Exempt Organizations Business Master File Extract (EO BMF). The Business Register is the Census Bureau's comprehensive database of U.S. businesses. Business Register data are compiled from a combination of business tax returns, data collected from the economic census, and data from other Census Bureau surveys. The Business Register includes sole proprietorships, partnerships, and corporations reporting business activity to the IRS. The EO BMF is a publicly available list from the IRS of all organizations that are exempt from filing federal income taxes.

The Business Register contains establishments that are out of scope for the nonprofit R&D module. These establishments are removed from the sampling universe. They include:

- Establishments engaged in the following North American Industry Classification System (NAICS) industries:
  - 110000, 111, or 112 - Agriculture production
  - 482 - Railroads
  - 491 - U.S. Postal Service
  - 521 - Monetary authorities - central bank
  - 525 - Funds, trusts, and other financial vehicles
  - 8131, 8134 - Religious and civic organizations
  - 814 - Private households
  - 92 - Public administration
- Establishments located in American Samoa, Northern Mariana Islands, Guam, Puerto Rico, or the Virgin Islands
- Establishments belonging to foreign entities
- Government establishments
- Establishments with zero payroll and zero employment
- For-profit establishments or nonprofit establishments within multi-establishment firms that have a majority of firm payroll in for-profit establishments

Information on industry classification, receipts, payroll, and employment was extracted from the Business Register during the frame construction. Nonprofit status for each establishment was determined by matching the Business Register to the IRS nonprofit list.

The sampling frame is stratified by primary type of organization, primary nonprofit activity, and state. Details on how firm-level sampling units are assigned to these strata follow.

The sample is selected at the firm level, so firms with multiple establishments were aggregated into one firm-level unit for sampling. Firm payroll, receipts, and employment are set to the respective sums across all establishments within the firm. Firm industry is set to the 6-digit NAICS code with the highest aggregate payroll within the 4-digit NAICS code with the highest aggregate payroll within the 3-digit NAICS code with the highest aggregate payroll within the NAICS sector with

the highest aggregate payroll. Firm industry is set to sector 55 (management of companies and enterprises) only if there are no establishments within the firm that belong to other sectors. Firm National Taxonomy of Exempt Entities (NTEE) code is set to the NTEE code with the highest aggregate payroll within the NTEE group (first digit of NTEE code) with the highest aggregate payroll.

After firm-level units are created and firm-level codes are assigned, firms are removed from the sampling frame if any of the following are true:

- Primary activity is identified as any of the following:
  - Education Services (NAICS sector 61 or NTEE code starting with B).
  - Housing and Shelter (NTEE begins with L except those with last 2 digits equal "05")
  - Recreation and Sports (NTEE begins with N except those with last 2 digits equal "05")
  - Youth Development (NTEE begins with O except those with last 2 digits equal "05")
  - Religion-related (NTEE begins with X except those with last 2 digits equal "05")
  - Mutual Benefit (NTEE begins with Y except those with last 2 digits equal "05")
- The firm is also in the Business Enterprise Research and Development (BERD) Survey sampling frame.
- Firm payroll is less than \$500,000.

Education services firms are out of scope for NPRA because the R&D for those organizations is measured by the Higher Education Research and Development (HERD) Survey. Firms also in the BERD sampling frame are removed because their R&D is measured by the BERD Survey. The remaining criteria identify firms that are unlikely to perform R&D activities.

All records in the nonprofit sample universe are assigned a primary nonprofit activity stratum as follows:

- If the organization's NAICS code begins with "622" or the first 2 characters of its NTEE is "E2" then its stratum is set to "A" (Hospitals).
- Else if the NAICS code begins with "5417" then its stratum is set to "C" (Science and technology).
- Else if the NAICS code begins with "62" or the first character of NTEE equals "E" then its stratum is set to "B" (Other healthcare).
- Remaining unclassified organizations have their stratum set to "D" (Other).

Firms are assigned to state strata based on the organization's physical location. When physical location is unavailable, state is assigned based on mailing address. Organizations that operate in more than one state are assigned to a multistate category.

#### *Sample design.*

The nonprofit R&D frame is stratified by state and primary type of organization (hospitals, other health care, science and technology, and all others). Within these strata some nonprofits were selected with certainty based on the following criteria:

- firms with known R&D activity (950 organizations)
- firms with payroll greater than stratum-specific payroll thresholds (1,200 organizations).

The nonprofit R&D sample consisted of 8,050 organizations; 2,150 were selected with certainty.

The remaining 5,900 noncertainty cases were selected using the stratified systematic random sample selection. The maximum sample weight was 6.9.

## Data Collection and Processing Methods

*Data collection.* The survey was mailed to 8,050 nonprofit organizations in July 2022. Organizations were sent a letter informing them of their requirement to report under Title 13, United States Code, Sections 224 and 225. The letter also provided instructions on how to access the survey and submit online. There were three mail follow-ups and four separate e-mail follow-ups conducted to increase response. The collection period closed 30 December 2022.

*Mode.* The data were collected using an electronic instrument.

*Response rates.*

*Check-in rate.* The check-in rate is defined as the unweighted number of surveys that were submitted online by in-scope organizations, divided by the unweighted total number of all in-scope organizations in the sample. Response to individual questions did not factor into this metric. At the close of the collection period, the check-in rate was 84%.

*Unit response rate (URR).* Unit response is defined as an organization providing total expenses or employment and answering the R&D performed and R&D funded questions. URR is the ratio between the number of unit respondents in a sample (numerator) and total sample size (denominator), expressed as a percentage.

For the nonprofit R&D module, the URR was 81%.

*Item response rates.* The distribution of values reported by sample organizations in the nonprofit module is highly skewed. Thus, rather than report unweighted item response rates, total quantity response rates are calculated, which are based on weighted data.

*Total quantity response rate (TQRR).* For a given published estimate other than count or ratio estimates, TQRR is the percentage of the weighted estimate based on data that were reported by units in the sample or on data that were obtained from other sources and were determined to be equivalent in quality to reported data and weighted only by sampling but not nonresponse weights. The TQRR for total expenditures for R&D performed by nonprofit organizations in the United States in 2021 was 80%.

*Total quantity nonresponse rate (TQNR).* For a given published estimate, TQNR, defined as 100% minus TQRR, is calculated for each tabulation cell from the nonprofits, except for cells that contain count or ratio estimates. TQNR measures the combined effect of the procedures used to handle unit and item nonresponse on the weighted nonprofits estimates. Detailed imputation rates are available upon request.

*Data editing.* Prior to tabulating the data, response data were reviewed and edited with both automated and manual procedures to correct reporting errors. R&D data were tabulated for records reporting \$50,000 or more in R&D expenditures.

Survey analysts reviewed the R&D reported by the respondents. Research was done by evaluating the reported R&D to expenses ratio and the organization's website information. Respondents were asked for clarifications or corrections on any reporting issues found.

Additional data errors were detected and corrected using an automated data edit system designed to review the data for reasonableness and consistency. The editing process interactively performed corrections by using standard procedures to fix detectable errors. Quality control techniques were used to verify that operating procedures were carried out as specified.

During the editing for FY 2021, errors in reporting for FY 2020 were discovered and revisions were made to correct these. For accurate historical data, use only the most recently released data tables.

### *Imputation.*

*Item nonresponse.* If detailed R&D data were not reported by a nonprofit and could not be inferred by survey analysts, it was imputed in the same ratio as reported by other nonprofits in the same sample stratum. These imputations are reflected in the reported imputation rates.

*Unit nonresponse.* Estimates produced from the ABS include adjustments to account for organizations that did not respond to the survey (unit nonresponse). If available, data from public tax filings, annual reports, or audits were used to impute expenses and R&D for select nonprofits known to have performed large amounts of R&D based on public information or prior surveys. Otherwise, unit nonresponse is handled by adjusting weighted reported data as follows. Each organization's sampling weight is multiplied by a nonresponse adjustment factor. To calculate the adjustment factors, each organization in the sample that is eligible for tabulation is assigned to the adjustment cells. The adjustment cells for nonprofits are based on certainty or noncertainty sampling strata and NAICS sector. For NAICS sector, there are three categories: healthcare, science and technology, and all others. For a given adjustment cell, the nonresponse adjustment factor is the ratio of the sum of the sampling weights for all organizations in the cell to the sum of the sampling weights for all organizations in the cell with reported data. For the nonresponse adjustment, an organization is considered a respondent if it satisfies the definition of response as available in the *URR* section above.

*Weighting.* The survey data are weighted for sampling and unit nonresponse.

*Industry classification.* Nonprofits are classified into one of four types of organization at the time of sampling: hospitals, other healthcare, science and technology, and all other organizations. Organizations tabulated based on the classification at the time of sampling with hospitals and other healthcare were collapsed into one tabulation group called healthcare. Classification is based on both the 2017 NAICS (<https://www.census.gov/naics/>) and the NTEE. NTEE code is not available for all organizations.

Organizations with more than one domestic establishment are assigned a single industry classification using a hierarchical system based on the largest payroll. For NAICS, the hierarchy is largest payroll sector, largest payroll 3-digit NAICS (within the largest sector), largest payroll 4-digit NAICS (within the largest 3-digit), and largest payroll 6-digit NAICS (within the largest 4-digit). For NTEE the hierarchy is first letter of the largest NTEE code then full 3 characters of the largest NTEE code.

Organizations are first classified as hospitals if the first two characters of their NTEE code are "E2" or the first three characters of their NAICS code are "622." Remaining organizations are classified as science and technology if the first four characters of their NAICS code are "5417." Remaining organizations are classified as other healthcare if the first character of their NTEE code is "E" or the first 2 digits of their NAICS code are "62." All remaining organizations are classified as other.

*Variance estimation.* This survey uses the delete-a-group jackknife variance estimator. The delete-a-group jackknife variance estimator requires that every sampling stratum contains at least two sampled firms. Sampling strata that do not meet this requirement are collapsed as needed to create a new set of variance estimation strata that satisfies this requirement.

## **Survey Quality Measures**

The estimates produced from the NPRA module are subject to both sampling and nonsampling errors.

*Sampling error.* Sampling error is the difference between estimates obtained from the sample and results theoretically obtainable from a comparable complete enumeration of the sampling frame. This error results because only a subset of the sampling frame is measured in a sample survey. For published estimates from NPRA, standard errors are produced for estimated percentages, while relative standard errors (RSEs) are produced for all other estimates. Tables of the estimated measures of sampling variability corresponding to each data table are available upon request.

*Coverage error.* Coverage error occurs when the frame fails to completely enumerate the population of interest. There can be both undercoverage error, where units are not included in the frame, and overcoverage error, where units included in the frame are out of scope for the population of interest. The NPRA module uses the prior year Business Register to construct the frame so any changes in businesses that would change the inclusion or exclusion of the business to the survey scope could be sources of coverage error. Prior to tabulation, the survey unit information is updated with the most recent available Business Register data to mitigate this source of error.

*Nonresponse error.* Nonresponse error refers to the differences in key estimates between units (i.e., organizations) in the sampling frame that were sampled for data collection and those that responded. For unit nonresponse, multiple follow-ups were conducted with nonresponding organizations to mitigate nonresponse error. The final survey weights incorporated nonresponse adjustments to reduce nonresponse bias in the final estimates.

Nonresponse bias for survey estimates cannot be directly measured using only survey data. However, the impact of nonresponse is incorporated into the variability of survey estimates under the assumption the data is missing at random. Missing at random for this survey means that, conditional on the nonresponse adjustments, the propensity for an organization to respond is not related to R&D performance.

To minimize item nonresponse, organizations were encouraged to report estimates of expenditures when actual dollar amounts could not be provided. This approach reduces item nonresponse error risk but may introduce measurement error. Imputation was conducted to help mitigate item nonresponse error.

*Measurement error.* The most common source of measurement error was reporting in different units (e.g., reporting in whole dollars rather than in thousands of dollars). This was corrected during data processing. Another source of error involved incorrect inclusion of organizations already represented in different R&D data collections. The R&D of these respondents was set to 0 if it was determined their R&D was already represented in other R&D survey responses. These cases included nonprofit organizations managing federal laboratories and some university-affiliated hospitals.

## Data Comparability

The questions in the FY 2020 module were first developed and used on the FY 2016 Nonprofit Research Activities Survey—which was the first national survey of R&D activities in the U.S. nonprofit population since 1997. Due to the differences between the previous surveys and the current module, data are not comparable for trend analysis.

## Definitions

- *Contract employees.* Contract employees are individuals contracted to work on projects otherwise fully performed by organization staff.
- *Depreciation and amortization.* Depreciation on tangible research assets, such as buildings or equipment, as well as amortization of intangible assets, such as patents.
- *Employment.* Paid employment consists of full- and part-time employees, including salaried officers and executives of corporations who were on the payroll in the pay period including 12 March 2021. Included are employees on sick leave, holidays, and vacations; not included are proprietors and partners of unincorporated businesses.
- *Other support personnel.* Staff who provide direct support services for the research project.

- *Research and experimental development (R&D)*. R&D is planned, creative work aimed at discovering new knowledge or devising new applications of available knowledge. This includes (1) activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses (basic research); (2) activities aimed at solving a specific problem or meeting a specific commercial objective (applied research); and (3) systematic use of research and practical experience and resulting in additional knowledge, which is directed to producing new or improved goods, services, or processes (experimental development). R&D includes both direct costs, such as salaries of researchers and administrative and overhead costs clearly associated with the organization's R&D. However, R&D does not include expenditures for routine product testing, quality control, and technical services unless they are an integral part of an R&D project. R&D also does not include market research; efficiency surveys or management studies; literary, artistic, or historical projects, such as films, music, or books and other publications; and prospecting or exploration for natural resources.
  - *Basic research*. Activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses.
  - *Applied research*. Activities aimed at solving a specific problem or meeting a specific commercial objective.
  - *Experimental development*. Systematic work, drawing on research and practical experience and resulting in additional knowledge, which is directed to producing new products or processes or to improving existing products or processes.
- *Researchers*. Professionals engaged in the conception or creation of new knowledge.
- *Research technicians*. Staff who work under the supervision of researchers to conduct research activities.
- *Research volunteers*. Unpaid workers contributing appreciable and essential activity to research performed by the organization. Their research skills should be comparable to the organization's employees. Individuals funded by other sources to conduct research at the organization are not considered volunteers.
- *Salaries, wages, and fringe benefits*. Costs for all compensation and benefits of employees that are included in the total R&D expenditures reported.

# Technical Tables

Table	Title
A-1	Organizations in the target population and selected for the sample, by industry: FY 2021
A-2	Response measures: FYs 2020–21
A-3	Unit response rates, by industry: FY 2021

TABLE A-1

**Organizations in the target population and selected for the sample, by industry: FY 2021**

(Number of companies)

Industry	NAICS code	Organizations in target population <sup>a</sup>	Organizations selected for the sample		
			All organizations	Noncertainties	Certainties
All organizations	All	40,650	8,050	5,900	2,150
Healthcare	621, 622, 623	22,500	4,250	3,300	950
Science and technology	5417	650	600	200	400
Other nonprofit organizations	Other	17,500	3,200	2,400	800

NAICS = 2017 North American Industry Classification System.

<sup>a</sup> Estimates of the number of organizations in the target population are based on the original sampling frame that was created to select the FY 2021 Nonprofit Research Activities module of the 2022 Annual Business Survey (see the "[Technical Notes](#)" for details).

**Note(s):**

Numbers are rounded for disclosure protection purposes. Certainty organizations have a selection probability of one and a sampling weight of one and represent only themselves. Organizations are selected with certainty based on known R&D activities and larger than stratum-specific payroll cutoffs.

Noncertainties are organizations with a probability of selection of less than 1.

**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE A-2  
Response measures: FYs 2020–21

(Percent)

Measure	2020	2021
Check-in rate <sup>a</sup>	85	84
Response rate (unweighted) <sup>b</sup>	83	81

<sup>a</sup> Check-in rate is the number of survey responses from in-scope companies divided by the total number of in-scope companies in the sample.  
<sup>b</sup> Response rate (unweighted) is the number of responding organizations that report total expenses or employment and that answer the R&D performed and R&D funded questions divided by the total number of in-scope organizations in the sample.

**Source(s):**  
National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

TABLE A-3

**Unit response rates, by industry: FY 2021**

(Number and percent)

Industry	NAICS code	Active reporting units <sup>a</sup>	Reporting units that met the response criteria (%) <sup>b</sup>
All organizations	All	8,050	81
Healthcare	621, 622, 623	4,250	80
Science and technology	5417	600	83
Other nonprofit organizations	Other	3,200	82

NAICS = 2017 North American Industry Classification System.

<sup>a</sup> Active reporting units are defined as reporting units of active organizations that are in the scope of the survey after all data have been processed.<sup>b</sup> Reporting units are considered to have met the response criteria if they report total expenses or employment and answer the R&D performed and R&D funded questions.**Source(s):**

National Center for Science and Engineering Statistics and Census Bureau, Nonprofit Research Activities FY 2021 module of the 2022 Annual Business Survey.

## Acknowledgments and Suggested Citation

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